



Payload 1 Daily Flight Report



**Date:** 2023-04-07

**Flight Campaign ID:** P1C1

**Airport, FBO ID, City:** Boulder Municipal Airport (KBDU) - Boulder, CO

**Aircraft:** N331AR

**Domain:** 00 (Training & Calibration)

**Sites Flown:** O10C (NIS Offset - Galaxy)

**Days left in Domain:** 6

**Report Author:** Mike

**Lidar Operators:** Mike

**Flight Hours:** 00:27, 00:23, 00:21, 00:19 = 01:30

**Spectrometer Operators:** Mitch

**Hours until maintenance:** 95.85

**Pilots:** Justin, Will

**GPS Instruments:** AOP\_KBDU

**Ground Crew:** Abe

**Summary**

The nice weather continued today in Boulder. The NIS Offset was completed in green conditions. Pending data QA, this completes preseason calibration flights for Payload 1.

**Concerns**

None

**Comments**

-A mercury lamp collection was completed today.

-Mike was signed off on the Galaxy.

**Daily Coverage**

Estimated Cloud Cover Key

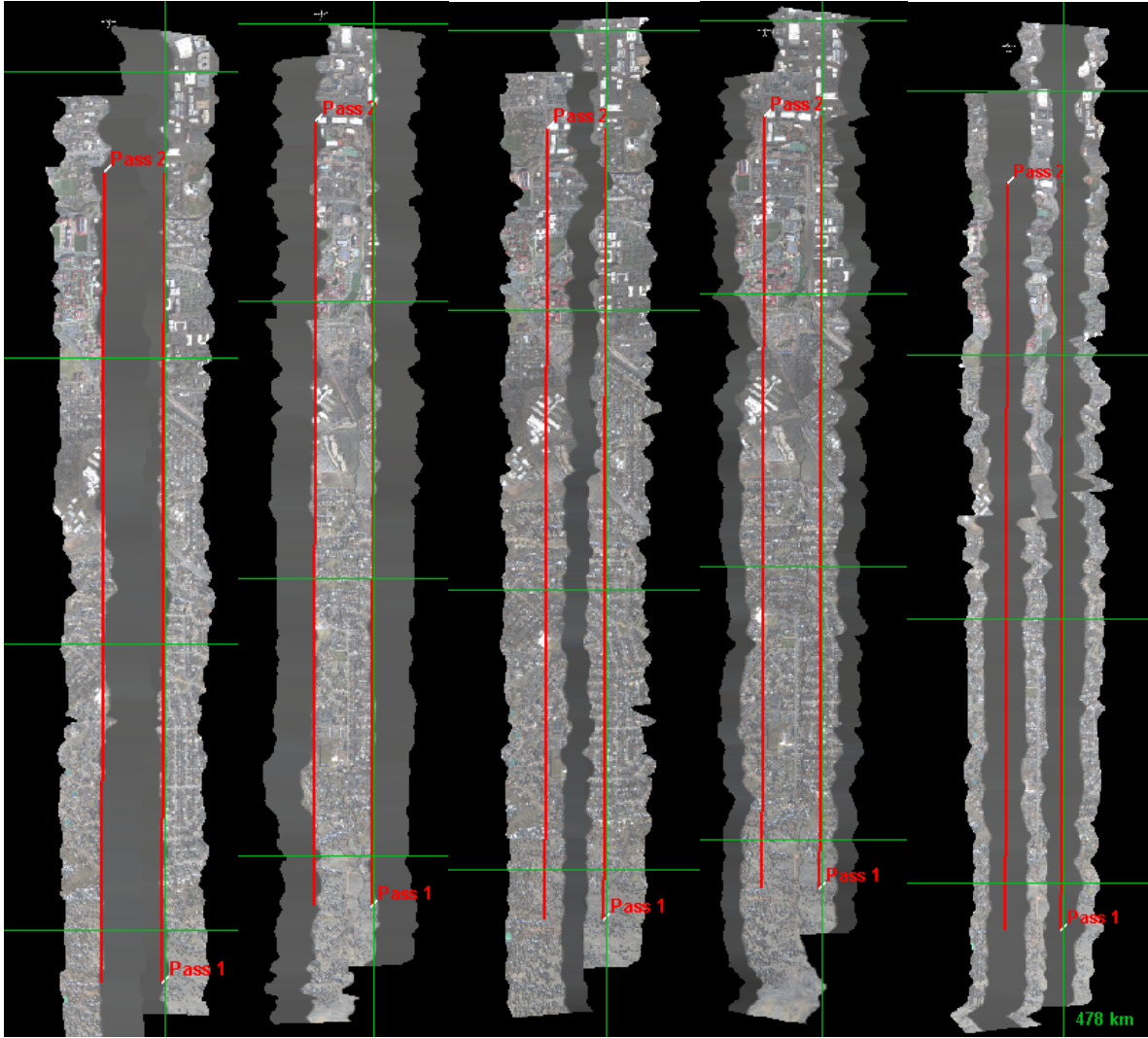
Green:	Yellow:	Red:
0-10%	11-50%	>50%

D00|O10C

Line #	1	2	1	2	1	2	1	2	1	2
Lidar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spectrometer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Camera	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cloud Cover										

Total number of lines flown: 10

# Flight Screenshots NIS



Various Ultrapol configurations affixed to the Spectrometer seen through the Mars-Rover waterfall.

# Lidar



## Cumulative Domain Coverage

### D00|B10F (Complete Greeley Boresight Geocalibration - 1500m, 1000m, 550m - Galaxy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Flown: 100% (20/20)

Green: 0% (0/20)

Yellow: 75% (15/20)

Red: 25% (5/20)

### D00|H10D (NEON Headquarters Lidar Validation - Galaxy)

1	2	3	4
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Flown: 100% (4/4)

Green: 0% (0/4)

Yellow: 0% (0/4)

Red: 100% (4/4)

### D00|N10F (Nominal Runway at KBDU - Galaxy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37				

Flown: 100% (37/37)

Green: 14% (5/37)

Yellow: 86% (32/37)

Red: 0% (0/37)

### D00|O10C (NIS Offset - Galaxy)

1	2
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Flown: 100% (2/2)

Green: 100% (2/2)

Yellow: 0% (0/2)

Red: 0% (0/2)

### D00|R10E (Table Mountain Radiometric Calibration - Galaxy)

1	2	3	4	5
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Flown: 0% (0/5)

Green: 0% (0/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

### D00|R10F (Boulder Airport Radiometric Calibration - Galaxy)

1	2	3	4	5
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Flown: 100% (5/5)

Green: 100% (5/5)

Yellow: 0% (0/5)

Red: 0% (0/5)

### D00|V10F ()

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29												

Flown: 14% (4/29)

Green: 0% (0/29)

Yellow: 14% (4/29)

Red: 0% (0/29)

# D00|W10D (Wiggle Timing Test - Galaxy)

1 2

Flown: 100% (2/2)

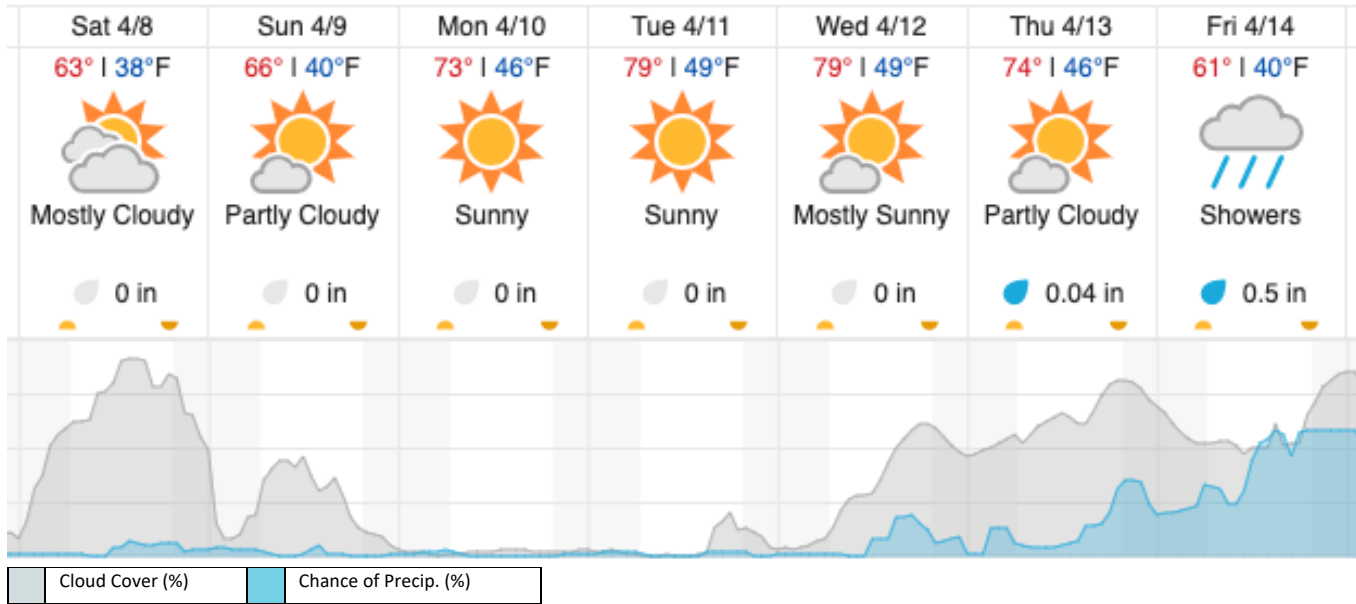
Green: 0% (0/2)

Yellow: 0% (0/2)

Red: 100% (2/2)

## Weather Forecast

### Boulder, CO



source: wunderground.com

## Flight Collection Plan for April 8, 2023

Recertification Flight (John)

Crew: John (Lidar), Mike (NIS), Mitch/Abe/Matt (Ground)